

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: CORELITE

Report Number:

Luminaire Tested: SQ4-FB-0U-075D-935-1D-UNV-STD-W-12

Issue Date: 8/1/2024

Test Information

Test Method: LM-79-2019
Report Number:
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2301-892-3)
Test Lab: INNOVATION CENTER
Issue Date: 8/1/2024
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: CORELITE
Catalog Number: SQ4-FB-0U-075D-935-1D-UNV-STD-W-12
Description: CORELITE SQ4 SUSPENDED LED LUMINAIRE
DOWNLIGHT 750 LUMENS PER FOOT
DIRECT ONLY
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: -

Summary

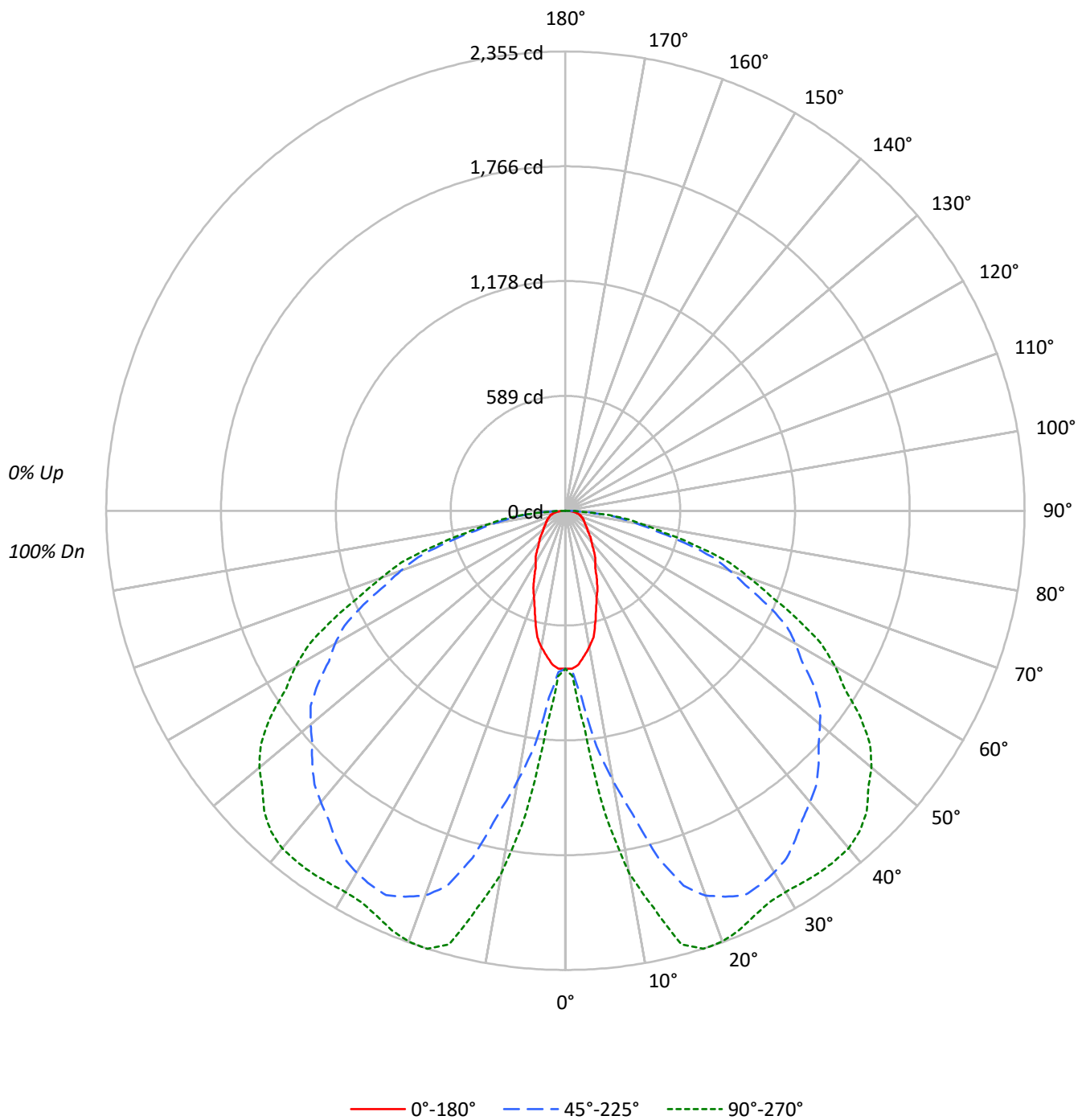
Lumens per Lamp: N/A
Luminaire Lumens: 6273.7 lumens
Efficiency: N/A
Efficacy: 79.0 lumens/watt
Spacing Criteria (0/90/45): 0.7 / 2.7 / 2.32
Luminous Opening: Rectangular (W 0.29' x L: 12' x H: 0')
CIE Type: Direct

Input Watts (W): 79.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT

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Luminous Intensity Polar Plot



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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20
RC	80				70				50				30				10
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102
1	108	103	98	94	105	100	96	92	96	93	89		92	89	87		89
2	97	88	81	75	95	87	80	74	83	77	72		80	75	71		77
3	88	77	68	61	86	75	67	61	72	65	59		69	63	58		67
4	80	67	58	51	78	66	57	51	63	56	50		61	54	49		59
5	73	60	50	43	71	58	50	43	56	48	42		54	47	42		52
6	67	53	44	37	65	52	43	37	50	42	36		49	42	36		47
7	62	48	39	32	60	47	38	32	45	38	32		44	37	32		43
8	58	43	34	28	56	43	34	28	41	34	28		40	33	28		39
9	54	40	31	25	52	39	31	25	38	30	25		37	30	25		36
10	50	36	28	23	49	36	28	22	35	27	22		34	27	22		33

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2493	2493	2493
5°	2438	2965	3452
10°	2214	4388	5893
15°	1884	5864	7328
20°	1536	6872	7695
25°	1283	7381	7775
30°	1083	7609	8016
35°	959	7721	8514
40°	837	7833	9073
45°	759	7987	9501
50°	699	8156	9802
55°	671	8309	9909
60°	690	8385	9828
65°	721	8318	9542
70°	773	8063	9024
75°	867	7480	8270
80°	969	6463	7201
85°	921	5381	6161

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 90°

Vertical Angle: 52.5°

Luminance: 9950 cd/sqm

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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	106.3	1.7
10°-20°	463.1	7.4
20°-30°	811.6	12.9
30°-40°	1045.0	16.7
40°-50°	1166.8	18.6
50°-60°	1118.9	17.8
60°-70°	890.4	14.2
70°-80°	524.6	8.4
80°-90°	147.0	2.3
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1381.0	22.0
0°-40°	2426.1	38.7
0°-60°	4711.7	75.1
0°-90°	6273.7	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	6273.7	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	811	811	811	811	811	
5°	790	846	961	1084	1118	73
15°	592	1087	1842	2227	2302	164
25°	378	1233	2175	2287	2291	174
35°	256	1157	2057	2182	2268	159
45°	175	908	1836	2087	2184	135
55°	125	606	1550	1792	1848	114
65°	99	396	1143	1290	1311	98
75°	73	250	630	686	696	76
85°	26	68	152	171	175	29
90°	0	0	0	0	0	

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CANDELA DISTRIBUTION (FULL):

	0°	10°	20°	30°	40°	50°	60°	70°	80°	90°
0°	810.7	810.7	810.7	810.7	810.7	810.7	810.7	810.7	810.7	810.7
2.5°	810.7	810.7	814.8	821.1	823.2	831.5	844.0	850.3	854.5	850.3
5°	789.8	800.2	834.1	883.7	933.2	987.9	1058.3	1092.2	1113.0	1118.3
7.5°	748.6	777.3	873.8	1003.0	1146.9	1289.8	1413.3	1513.4	1571.8	1574.4
10°	709.0	758.5	907.1	1105.2	1303.3	1506.7	1676.1	1780.4	1863.8	1887.2
12.5°	665.2	739.8	942.6	1207.4	1478.5	1706.9	1895.1	2009.7	2076.5	2085.3
15°	591.7	701.2	993.1	1368.5	1704.8	1978.5	2158.3	2249.6	2291.3	2301.7
17.5°	523.4	666.8	1037.5	1494.7	1893.0	2139.6	2276.1	2333.5	2354.3	2355.4
20°	469.2	633.4	1058.3	1582.3	1988.9	2210.5	2309.5	2346.0	2356.4	2351.2
22.5°	429.6	598.0	1070.8	1640.6	2047.3	2237.6	2311.6	2329.3	2333.5	2328.3
25°	378.0	539.6	1071.3	1717.8	2106.2	2244.3	2283.4	2288.7	2293.9	2291.3
27.5°	332.1	474.4	1055.7	1768.9	2114.5	2212.5	2230.8	2243.8	2260.0	2263.6
30°	305.0	432.7	1034.8	1785.6	2106.2	2179.2	2197.4	2220.9	2249.6	2257.4
32.5°	284.1	393.1	1003.6	1787.7	2085.3	2139.6	2164.1	2208.4	2249.6	2261.6
35°	255.5	333.7	951.4	1772.5	2038.4	2074.9	2127.0	2200.0	2254.8	2267.8
37.5°	227.3	290.9	880.5	1741.8	1976.9	2015.0	2101.0	2189.1	2250.1	2266.2
40°	208.5	265.9	826.3	1712.6	1928.9	1973.3	2080.1	2176.6	2241.7	2260.0
42.5°	193.9	245.0	767.9	1675.0	1874.7	1935.7	2055.1	2157.8	2218.8	2232.9
45°	174.6	213.7	675.1	1605.7	1790.8	1882.0	2012.4	2111.4	2168.8	2184.4
47.5°	156.4	191.9	578.2	1526.5	1705.3	1816.9	1950.3	2044.2	2096.8	2107.2
50°	146.0	177.3	513.5	1470.2	1644.8	1764.7	1900.3	1994.1	2038.4	2048.8
52.5°	137.6	164.7	453.0	1405.5	1582.3	1710.5	1839.8	1925.3	1965.4	1969.6
55°	125.1	148.6	372.8	1305.9	1483.2	1616.1	1741.3	1809.0	1837.7	1848.1
57.5°	118.3	136.6	309.7	1198.0	1371.6	1505.1	1618.7	1671.4	1694.3	1698.0
60°	112.1	130.3	276.3	1120.9	1300.7	1425.9	1524.9	1569.2	1590.1	1597.9
62.5°	105.8	126.2	251.3	1041.6	1217.3	1338.3	1424.8	1462.9	1479.5	1481.1
65°	99.1	119.9	221.6	920.2	1087.0	1199.1	1266.8	1298.1	1305.9	1311.2
67.5°	92.3	113.7	200.2	797.6	952.5	1045.3	1095.3	1122.4	1124.0	1134.9
70°	86.0	109.5	187.7	714.2	852.4	941.0	982.7	1003.6	1001.0	1003.6
72.5°	81.8	103.2	179.3	628.7	756.5	826.3	863.9	878.4	880.0	880.5
75°	73.0	91.2	166.8	497.9	599.5	659.5	688.2	685.6	693.4	696.0
77.5°	63.1	78.7	137.1	367.0	449.4	489.0	512.0	519.2	516.6	517.2
80°	54.7	70.4	112.1	281.5	349.3	380.6	401.4	406.6	404.0	406.6
82.5°	44.3	57.9	87.1	208.5	261.7	286.7	301.3	302.4	303.9	308.6
85°	26.1	33.9	52.1	114.7	146.0	159.0	169.4	172.0	174.6	174.6
87.5°	10.4	14.6	27.1	48.0	60.5	64.6	64.6	60.5	64.6	58.4
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)